DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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RECLAIMING WET LANDS.

There are in many parts of New England numerous swamps or wet meadows, of various extent, from one acre or less, to hundreds of acres; which are almost entirely level, and are covered with water during the wet season. In these swamps vegetables have been growing for ages, which have decayed, forming a vast accumulation of peat, mud or muck, which may be made a rich mine to the farmer. When these lands are properly improved they furnish large crops of excellent grass, which may be relied on in case of a severe drought, when high lands fail; for if they are drained deeply and thoroughly, so as to make them sufficiently dry in a wet season, the main drain may be dammed in a dry time, so as to furnish a sufficient supply of moisture, by keeping the water tolerable near the surface. As a small amount of manure will keep these lands in a very productive condition, and as they furnish materials enough for a large amount of manure, there will be a considerable surplus to aid in keeping the upland in good condition.

This month is generally a good season for reclaiming wet lands. In the first place clear up all bushes, and remove the wood, such as old logs, stumps, &c.; if it be too soft to remove these at the present season, or if there be a very large quantity on the meadow, and it be not convenient to remove it in the summer, pile it up and remove it in the winter, when the ground is frozen.

In draining, make a main drain through the meadow, to carry off the stream, if there be one, or the water from the springs. This drain must vary in depth, according to the amount of water to be conducted off, and the descent and length of the meadow. In some cases, where the meadow is long and nearly level, and a large amount of water is to be discharged, it is necessary to cut the drain four or five feet deep at the foot of the meadow. After making the main drain, make marginal drains around the meadow at or near the highland, to carry off the water that oozes off of the highland. Many persons neglect this in the beginning, and have to make them afterward, to complete their draining. If there be not marginal drains, and drains are made twenty or thirty feet apart, running directly from the highland to the main drain, the water will run out of the banks and extend down a number of rods between the drains, as may be seen by the worthless plants growing there.

Make cross drains from the marginal drains to the main ditch, sufficiently near to drain the meadow well. They should be twenty, thirty or forty feet apart, according to the depth of mud, the degree of moisture, the descent of the drain, &c. We have seen meadows two acres in extent, of an oblong form, completely drained so as to be dry enough for tillage merely by a marginal drain, for there was no water on them except what ran from highlands; as that was cut off by a marginal ditch, the draining was thorough.

The depth of drains should vary according to circumstances. Generally the drains should extend through the peat or mud, into the hard soil, unless the mud extends to a great depth; and in this case the drains should be pretty deep, generally two-and-a-half to three feet deep. Drains may be made with the sides slanting, and these sides covered with sods of grass, which gives them a beautiful appearance, and they will yield grass even to the bottom of the drain. If the sides are quite slanting, a team can pass over them conveniently. Some persons fill the drains with small stones to the surface, so that they can be passed over conveniently. Others fill them with small stones till within a foot of the surface, and then fill up with earth, so that grass will grow over the drain. These modes will answer where there is a good descent, and the drains are short. But if the drains are long and the descent small, the water will pass along sluggishly and clog, and the drainage be imperfect. This evil may be avoided by making channels in the bottom of the drain. But if the mud is deep, so that the drain does not extend down to the hard soil, flat

stones, planks or boards should be laid at the bottom, else the stones laid on each side, to form a channel will sink in the mud, and the mud will rise and obstruct the channel.

Soon after the drains are made, the meadow will settle, and the earth become more firm and dry.—When there are no roots or other obstructions, and the ground is sufficiently hard, it is best to plough, as this operation will more thoroughly destroy the weeds and wild grasses. Whether the meadow is plouged or not, a good coat of gravel or sand should be hauled and spread. Gravel is best, and sand or sandy loam is preferable to a more compact or tenacious soil. After applying the gravel, add a good dressing of compost manure. Harrow thoroughly, sow herds grass and red-top the latter part of August or early in September, and work it in with a brush harrow, and clover seed in March, and a good crop may be expected the next season. If the ground be not sufficiently firm to cart on gravel or sand, it must be delayed till it is frozen in winter. Compost manure may be carted on also and spread with the gravel as soon as it is thawed in March, and brush over with a harrow before the meadow is thawed. Then sow herds grass, red-top and clover, and the seed will take without brushing. A tolerably good crop may be expected the same season.

These general remarks may be of advantage to the inexperienced; there are various circumstances attending these operations on which the operator must exercise his judgment at the time of performing them, as no precise rule can be given, adapted to all circumstances. There are meadows is Massachusetts, which, before drained, were valued at only ten or fifteen dollars per acre, that have been reclaimed at a moderate expense, and are now worth two hundred dollars per acre; as they will usually pay the interest on that sum from the net profit

DRAINING CELLARS.

Some cellars are so wet that they not only need a drain from the cellar, but it is necessary to make a drain round the cellar at the edge, to keep the surface sufficiently dry; or instead of a drain around the cellar, there must be a floor of plank or other materials. One of the most expensive and worst modes is a plank floor; it not only costs a good deal in the beginning, but this cost occurs very often, as the planks soon decay, from the moisture under them. A cellar with a plank floor is not good to keep vegetables in. Another great evil is the unwholesome air produced by the decay of the planks, which affect not only the atmosphere of the cellar, but that of the rooms above.

The following is a very cheap and excellent mode for making a good cellar, where the soil is wet. Sink the cellar walls about one foot below the surface of the cellar. This lower part may not have a good face, but no part of the stone should project in far, as they will be in the way of the drains. After the walls are made, dig a channel around by the wall about one foot deep, and of the same width, with a slight descent towards the drain from the cellar. Then lay at the bottom of this channel, a few inches from the wall, draining tiles or pipes. At the corners, as the pipes cannot be inserted into each other, nor the end of the tiles brought in close contact as in straight draining, some stones should be laid neatly and firmly around the open space at the corners, and covered with a thin flat stone.

All should be well done, so that the rats cannot disturb them. Then cover the tiles with gravel or gravelly loam, and fill up the channel with the same soil that is used for the surface of the cellar. At the end of the tiles, at the outlet, place a wire screen, or some pieces of wire or long nails, so that the rats cannot enter the tiles. If the soil in the cellar is not suitable to make a good surface, procure fine loam and spread it over to a suitable depth. Tread or beat it down solid, and it will make a good firm floor; and if it keep a little moist, it is the better for keeping both vegetables and fruits. A sandy cellar is very unfavorable for many purposes.

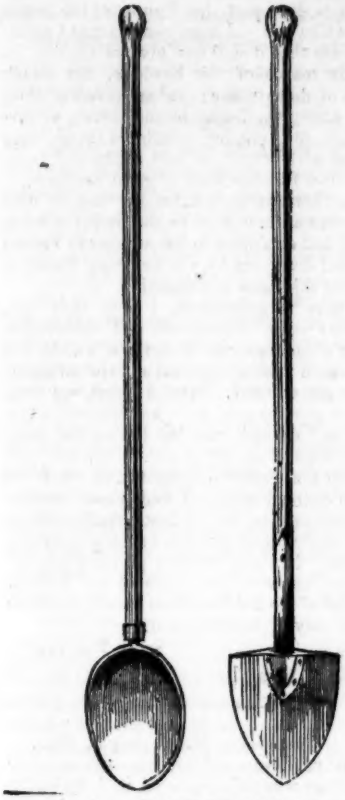
A cellar thus drained will be sufficiently dry when there are no springs inside the drains. In that case the water should be conducted off by tiles. The degree of moisture at the surface of the cellar, which should be slight, such as we find in common tillage land in fair weather, must be regulated by the depth of the loam, much depending on the wetness of the soil, and its texture in regard to retaining moisture.

This mode of making a good cellar, where the land is wet, is very cheap and durable. The tiles or pipes would cost only about one dollar for a cellar 25 feet square, and the cost of laying them is but a trifle. Pipe tiles suitable for the purpose are made in this vicinity, specimens of which may be seen at the horticultural store in School Street.—We hope this subject will receive more attention, and that wooden floors for cellars will be dispensed with.

A SUCCESSION OF STRAWBERRIES.

The following is a good succession of strawberries for a long period: Early Virginia, Hovey's Seedling, Jenny's Seedling, and Williey. We had fruit, from them for nearly five weeks. These varieties are all great bearers, and the fruit is excellent; excepting the fruit of the Williey, which is pretty good. They are all remarkably vigorous and hardy, excepting Hovey's Seedling; this needs to be planted thick, as it does not form runners or ofsets so fast as the other varieties, and it is also rather liable to be winter killed.

☞ George Thurlow, of West Newbury, has a young orchard of beautiful young Baldwins, covering thirty-five acres!



POST SPOONS.

These are very convenient implements for digging post-holes. They save a great deal of labor, as in using them it is necessary to make but a small hole compared with the one which must be made with common implements. As "time is money" with the farmer, he should economize it by using labor-saving implements and machines, especially when they can be obtained at a very low or moderate price, and make a great saving of labor.

INSECT OPERATIONS.

Scarcely had the ink dried from our pen used in sketching an obituary notice of Mr. Flanders' *black bug*, when an innumerable company of others arrayed in *green* were brought to view, by Mr. Whipple, a neighbor of Mr. Flanders, both of them residents of a region of boundless production on the banks of the Merrimac. Mr. Whipple thinks the insects he has now found are the great destroyers of the potato.* He gives this information freely, without hope of reward—other than what is to be found by doing good to his fellowmen. It will be remembered that Mr. W., at the meeting of farmers in the State House in March last, announced that he had discovered the true cause of the decay of the potato—that it was *a bug*—but whether he then had in mind *a black or green bug*, we are not aware that he gave any information.

That the potato, as well as many other plants, is oftentimes destroyed by insects, no observing man can for a moment doubt. Within our view, from the window where we sit at this moment, there is a considerable patch of potatoes, giving unmistakeable indications of having faded, and fallen by the ravages of insects upon the leaves, punctured with innumerable small holes—have here and there a speck of black in many places, eaten as it were thread-bare—the leaves have turned yellow, and withered; and the probability is that the produce of these potatoes will be few and small. No one can doubt that insects have caused this condition. It has been gradually coming on for weeks. So much has been said, that we have watched them with interest. But we do not feel warranted in drawing a general inference of the operations of the potato disease, from this example. We presume like instances of decay have often been noticed.

If Mr. W. had given a *specific name* to his insect, or a description that would apply *to that*—and *that only*,—then there would have been the means of determining whether we had witnessed the operations of the same insect that he did. But when he describes it as "a green insect or fly, very small, and very numerous, found upon almost all kinds of tender plants, fastening upon the under side of the leaf, and at almost every season of the year,"—we presume there are scores of insects that have many, if not all these characteristics. In Dr. Harris' treatise, p. 187, *one* is mentioned which Reaumur is said to have proved to be the progenitor of six thousand millions of descendants, in five generations, in one season. Let each of these have the multiplying powers of their progenitor, and what is there that will not be covered, aye, destroyed, by their operations, be they ever so diminutive in size? Hence the imperative necessity of understanding the *name* and *true character of an insect*, before we undertake to draw any conclusions as to its operations.

July 26, 1851.

* See Salem Observer of this date, for a highly interesting letter from this distinguished practical farmer.

ACKNOWLEDGMENT.

A New and Valuable Cherry.—We received of James Hyde & Son, nurserymen, Newton Centre, a lot of fine cherries on the first day of August, which from its lateness and superior quality, we think will be a valuable acquisition. It originated in that neighborhood. The fruit is medial size; obtuse heart shaped; dark red and mottled, light amber in the shade; stem rather short and slim; flesh soft, tender, very juicy, sweet, rich, and delicious; stone small; ripe the first day of August.

A NEW INSECT DEPREDATOR.

We have received the insects forwarded by Dea. Fowler, and they are strangers to us. As he remarks, insects will increase with improved cultivation, and every cultivator in the country should attend to this subject, and endeavor to contribute something towards learning the habits of insects injurious to cultivation, and the best mode of destroying them. The following correspondence shows that we may have a new enemy in the field:

Danvers, July 17, 1851.

MR. COLE:—I send you some insects which I noticed, for the first time, on the fifteenth of June last, by the side of the highway adjoining my garden, and feeding upon the leaves of the weeds and grasses there found growing. As these insects were unknown to my neighbors as well as myself, I was very desirous of knowing more of their habits; I therefore sought information from Dr. T. Wm. Harris, of Cambridge, concerning them. My attention was first called toward these insects by noticing large quantities of the leaves of the burdock, completely dead, and having the appearance of being scorched with fire. Upon examining them I found the under side of their leaves swarming with insects, having to a casual observer somewhat of the appearance of the cucumber bug, but larger. When I attempted to seize them, for the purpose of examination, I found them exceedingly active, using both their wings and legs to elude my grasp, and dodging from the under to the upper side of the leaf. They are still found where I first noticed them, but in less numbers, and they are now disappearing.

At the time I wrote to Dr. Harris I had fears that this insect would become troublesome to us. I have since found, upon examination, that it has appeared in my garden upon more than a dozen different kinds of plants, sucking their juices, some of them to their serious injury. I am now more strongly inclined to the belief, should the insects under consideration abound, that they will become general feeders. Those who have been cultivators for the last twenty-five or thirty years can probably well remember when the ravages of the rosebug was confined to the petals of the rose and a few other plants. It is only within a few years that it has attacked the grape vine, but when numerous, it can now be found feeding on many plants, apparently without much choice of food, it having become in a few years a most indiscriminate feeder. If you are acquainted with this insect, any remarks upon its habits, or manner of destroying it, would be acceptable. Yours &c., S. P. FOWLER.

Danvers New Mills, June 8, 1851.

DEAR SIR:—I have inclosed in this letter some insects, which I noticed a few days past, feeding upon the under side of the leaves of the common burdock, which I do not recollect ever before to have seen. With my limited knowledge of insects I am unable to make out what they are, but suppose they belong to the family of the leaf-eating beetles, perhaps to the Cryplocephalians. There is a group of insects of this genus figured in Say's American Entomology, in the second volume, that resembles these beetles somewhat. I could describe some of their habits, as they have appeared to me for a few days past, but I suppose the insect is well known to you. I must confess that I entertain great fears that it will not always confine its ravages to the leaves of the burdock, but attack other plants of more value; indeed it has already commenced eating the leaves of the clover, yellow dock, plantain, &c., coming within its range. As it is provided with wings, is very active and voracious, and when found is seen in great numbers, I have the most serious apprehensions that it may one day become a great pest to the cultivators of the soil, and add one more to the number of insects to be hereafter described by you as being found in Massachusetts injurious to vegetation.

My fears may be groundless, I hope they are, but after many years' experience and observation I have found almost invariably that new weeds, and newly discovered insects, increase and spread themselves over the country. And I think we shall find it to be a general rule, fully established in this country and in England, that the higher and more extensive the cultivation of the soil, the greater will be the number and variety of insects and weeds we shall have to contend with. I find these beetles, like most other insects, can be destroyed by the application of whale oil soap, those I send you having been so killed. It would be very pleasing and acceptable to me, as well as to some of my friends, to be informed of the habits of this insect, together with the best way of destroying it.

Yours with respect, S. P. FOWLER.

DR. T. W. HARRIS.

Cambridge, Mass., July 3, 1851.

S. P. FOWLER, ESQ.:—Dear Sir,—Your letter of the 28th June was duly received with its enclosure of insects for my examination. The insects are *bugs*, properly so called, and belong to the order HEMIPTERA. They are distinguished from beetles by having a kind of bill or sucker, proceeding from the head and bent backwards upon the breast, in which respect they agree with the common squash bug. I am not aware that this species has been described; but you will find it named *Capsus quadrivittatus* (the four striped Capsus) in my Catalogue of the Insects of Massachusetts, appended to the second edition of Prof. Hitchcock's "Report of the Geology &c. of Massachusetts," p. 578. An insect, belonging to the same group, is described in the work on destructive insects, p. 161 &c., under the name of *Phytocoris lineolaris*. Of the habits of your insect I had no particular infotmation before the receipt of your letter. Some of my specimens were taken in July, 1829, on grass, in Milton, Mass., and others were received from New Hampshire and from Maine. All the plant bugs are eminently injurious to vegetation. Some seem confined to particular kinds of plants, as the great squash bug, above named; others are more general feeders, as the little *Phytocoris*, and the species that you have sent to me. They exhaust plants by puncturing them with their bills and sucking out the sap.

I have found no remedy so useful to protect plants and to destroy the small kinds of bugs, aphides, &c., as the solution of oil soap, and am glad that you tried it upon the insects under consideration and found it effectual.

Respectfully yours, T. W. HARRIS.

For the New England Farmer.

SUMMER PRUNING OF GRAPES.

Mr. Cole: — Dear Sir,—My attention was drawn to an article in your last week's N. E. Farmer, upon the practice of trimming grape vines in the summer, and knowing that your columns are always open to fair discussion, and differing somewhat from the opinion there expressed, I will lay before you my idea of the subject.

You there make strenuous objection to cutting back to the fruit, and whilst you do not distinctly say so, still the reader would naturally infer that you disapprove entirely of all summer pruning. Having cultivated the grape, for several years, my own experience and observation incline me to advocate summer shortening for at least two reasons: first, to improve the fruit of the present year, and second, to make the vines capable of a better crop the season ensuing.

All must have observed that after the primary has run a few eyes, beyond the bunches of fruit, a tendency developes itself to burst into laterals. Now if we leave these laterals on, the length of the primary is much decreased and the cane much diminished in size. After these secondaries have grown three eyes, they should be shortened back to the second. First, in order not to divert the flow of sap from the main branch; and second, should we desire to leave a long runner, for shade or otherwise at the winter pruning, the wood may be thoroughly matured so as to bear a good crop without injury to the vine. Besides, the eyes becoming more matured the trouble and expense of training is much diminished.

The same holds good with regard to shortening back all fruit-bearing branches not desirable for shade, ornament, or to cover the espalier. Whilst I would most vehemently oppose the practice of cutting back to the fruit, I advocate very strongly cutting within 2 eyes of it, for in the interval, whilst the then terminal eye is getting underweigh for a fresh start, more sap is forced into the fruit, giving it thereby better size and shape, and second, the terminal alone starting, the second is more thoroughly matured for the next season, thus reducing the amount to be taken off in the winter. After the new shoot has grown a short distance, cut it back in the same manner, when it will give no more trouble that season, as before it gets well growing a second time the summer is so far advanced as to prevent its attaining any great size. The same course may be pursued with the main branches after they have attained the length desirable for the next year's start. One of the most prominent arguments for severe winter pruning is that during the summer the vines do not sufficiently ripen the whole of the wood, and therefore the upper buds, being more or less winter killed, grow but poorly, reducing at the same time the strength of the vine by a superabundance of leaves and wood.

If, however, after suffering them to attain a moderate length, about the middle of July, we stop their progress by snipping off their ends, and continue through the season cutting the lateral and terminal shoots within two eyes of the base, we shall have in the winter a greater number of healthy and fruit-bearing buds, well matured and better proportioned to the strength of the vine, than by any other system.

So far from considering judicious summer pruning injurious, my own experience leads me to prefer it to winter. No doubt you may have observed vines bleeding in the spring which were pruned in the winter, and have wondered accordingly, but without reason.

By cutting off the end of the shoot we leave exposed the sap vessels; no new formation of tissue going on at this season, they can only be covered by the death of the end of the branch, or by an application or exudation of gum, and therefore when strong vines are well trimmed in the winter, the spring flow of sap, finding no sufficient outlet in the growing buds, must escape somewhere, and finding less obstruction terminally than laterally, bursts out at the end, thus weakening the vine to a very great extent.

In the summer, on the contrary, the tissues ever forming and be cut smooth or rough, the wood heals readily and no bleeding follows. This view of the case is countenanced by analogy; all now prune their apple trees in the summer, and doubtless the same reasoning would apply to trees of all descriptions.

If the vines are cut back to the fruit then an injurious result will follow; the bud next below the branch will start, and appropriate a large portion of the sap intended for the fruit, leaving it to a miserable dwindling existence. No plant needs greater care or higher culture than the vine, and none will so surely or quickly show it; and unless, in the instance you mentioned, the vines were cut back to the fruit, I should be more inclined to attribute their miserable condition to lack of manure or water than to the summer pruning.

Hoping, if my views are erroneous, you will correct them, I remain in haste, Rusticus.

Pembroke.

Remarks.—We are pleased in having an opportunity to lay before our readers the interesting views of our correspondent, and am much obliged to him for the detailed manner in which he has given his mode of management. Our remarks refer to native vines and out-door culture, which differs materially from the management of foreign grapes in hot-houses.

For the New England Farmer.

CONCENTRATED MANURES.

Mr. Cole: — A great and increasing fondness for agricultural pursuits induced me to subscribe to your excellent journal, from which I continue to receive valuable hints and excellent practical information. As I observe that you very patiently attend to and cheerfully answer such queries as from time to time appear in your paper, I beg the favor of receiving through the same source answers to the following questions on farming matters.

Bone Dust.—I find the need of this rich fertilizer. I could procure horns (would they answer?) and bones, and suppose that my readier means will be to dissolve them in sulphuric acid. What quantity is necessary, and what is the ordinary cost?

Could you conveniently inform your readers whether the following is likely to be an economical receipt for artificial guano? I have seen it highly recommended as being one-fifth of the cost of guano.

Nitrate of Soda.....	20 lbs.....	00 per lb.
Sulphate of Soda.....	8 lbs.....	2 cts. per lb.
Sulphate of Magnesia.....	5 lbs.....	4 cts. per lb.

Sulphate of Lime	2 bushels	20 cts. per bush.
Carbonate of Iron	2 drachms	½ ct. per drachm.
Sal. Ammonia	10 lbs	16 cts. per lb.
Carbonate of Ammonia	5 lbs	25 cts. per lb.
Fine bones	60 lbs	½ ct. per lb.
Magnesia	2 drachms	1 ct. per drachm.
Salt	10 lbs	6 mills per lb.
Cart load of meadow mud		00

What would be the cost of these materials?

Winter Oats.—Where can they be purchated, and at what rate? Who knows any thing about them, and the tillage of them?

For fear of overdoing you with questions, I will conclude my rambling letter.

Yours truly, O.

Nova Scotia, June, 1851.

REMARKS.—Horns reduced to a fine state are a valuable manure. Horn shavings from the comb manufactory are a powerful fertilizer. There are many modes of reducing bones to a fine state suitable for manure. The most common in England and in this country is by dissolving them in sulphuric acid. If the bones are well ground, or crushed tolerably fine, one-third of their weight in acid will be sufficient; if coarse, one-half of their weight will be necessary.

The acid is usually diluted by adding one, two, or three parts of water. No uniform quantity has been agreed on. One person made a clay bed, put in 100 bushels of half inch bones, damped them, then turned on 1,700 lbs. sulphuric acid, without dilution, stirred all up thoroughly till effervescence subsided, which was in about two hours. Then he let them remain about ten days, and added water to bring the mass to the consistency of porridge, then cinders, to bring it to a powdered state. In this case only 17 lbs. of acid was used to the bushel, which was probably less than one-fourth the weight of bones. The cost of sulphuric acid is about two and a half cents per pound. It is a good manure.

We do not know the value of artificial guano made by the above prescription. We have annexed prices but they vary much. Sometimes refuse salt may be had at 15 or 20 cents per bushel; while in some sections salt is 60 cents or a dollar per bushel. Ground plaster may be had at some mills at 20 cents per bushel, while it costs twice that sum in other places. We are not acquainted with winter oats. The wheat inquired for was distributed long since.

For the New England Farmer.

MANAGEMENT OF YOUNG DUCKS.

Farmers generally say there is a difficulty in raising "ducks." They require a place to bathe in, but they should not be suffered to run at large when it rains, as their plumage is very thin and of a downy nature, absorbing the water instead of shedding it, they thereby become chilled; this retards the growth and they become imbecile and weak. At a season of the year when rose-bugs are thick, they should be kept in a tight coop leaving just room enough at the ends for them to see to eat; rose-bugs fly in the direction the wind blows, and scarce ever against the wind—I find by experiment that rose-bugs in a few hours cause the death of young ducks. When my brood was six weeks old, I took one of them and put him into a tight box. I then caught some dozen or more rose-bugs and gave them to him—in an hour's time he began to sicken. I watched the progress, and as soon as he died, I opened to his crop, and found the bugs had eaten holes through the crod, nearly as large as the holes they eat in rose-leaves. I shut the living ones up in a close coop, and they are all doing well. Yours,

S. ELDRIDGE.

Canton, Mass., July, 1851.

For the New England Farmer.

COLOR OF HOUSES.

FRIEND COLE:—

"Variety's the very spice of life,
That gives it all its flavor."

So thought the venerable Cowper. All, however, do not agree with him, and among the number is friend "J. W.," who in writing upon the color of houses, recommends white exclusively. Says he, "I consider pure white *the color* for our dwellings." Now as far as color is concerned, I consider it a matter of *taste* altogether. One may prefer *red*, another *yellow*, and so on through all the various shades of color; while some, like "J. W.," have a *purely white* taste, and white is an absence of *all* color. I find no fault with any man's taste, nor do I wish to prevent him from gratifying it, but a majority of farmers, especially in country towns, are under the necessity of studying economy.

This is a point which was discussed in an editorial article in No. 6 of the current volume of the "Farmer," but one to which "J. W." only incidentally refers, and then—without denying its truth—says, "I should still be decidedly opposed to the change." Even though white *is* less durable, and is also injurious to the eyes, he would have no colored paint on his dwellirg! I fully concur with "J. B. D." in the opinion that only a small portion of the readers of the Farmer possess this *white taste*. For myself I will say that for common farm-houses I have a preference for *red* with white trimmings. Yellow is also a good color, especially for large houses. Each of these has two valuable qualities to recommend it,—*cheapness* and *durability*. Some other colors look well, and are, perhaps, as durable, but they are more costly.

In accordance with my *text*, my rule would be this,—the more compact the houses, the more would I vary the color. In a village I should prefer to see the various colors interspersed, and in front of those painted white I would have evergreen trees set out, in order to give the scene a more animated appearance. If trees are set along the streets and roads,—and they certainly should be,—I should prefer having deciduous and evergreen trees set promiscuously, always having the darker trees in front of the lighter colored houses, so as to give the greatest possible variety to the scene.

I agree with "J. B. D." in saying that "pure white will not harmonize with nature," and "J. W.'s" assumption that the argument is all on his side,—that this "is just the reason why our buildings look better white than colored,"—appears to me untenable; much less will a reference to "a *very weak* spot somewhere,—an entire want of self-con-

trol," be likely to weigh heavily in favor of *white paint*, with the reflecting portion of the community.

Arguments to be effective, must be supported by facts. We may give opinions, but they will almost always be coincident with preconceived notions. I am not prepared at present to show the comparative durability of white and of colored paints, and therefore I do not recommend any *particular* color, yet I am decided in the opinion that white is not "*the color.*" Perhaps some other person can give us some statistical information upon the subject; if so, I hope he will do it, for in this way he will assist enquirers in deciding which is the *best* paint.

L. VARNEY.

Sandwich, N. H., 7 Mo. 25th, 1851.

☞ By some mistake, *Mr. Editor* was prefixed to a former communication of friend Varney, which is contrary to the style of the Society of Friends.

For the New England Farmer.

COLOR OF COUNTRY HOUSES.

MR. COLE:—Your correspondent J. W. takes it in high dudgeon, because everybody don't choose to endorse his absurd notions in regard to the color of country houses; and one would suppose from his manner that he thought his opinion was *law*. It strikes me that his sneering about *weak spots* is in quite as bad taste as his notions of color. This calling your opponent a fool, is often resorted to by those who have neither wit nor brains enough to back up by a sensible argument any statements they may make or have made—and this brings to my mind the parallel of the boy at school, who when at variance with his companion, said with a pout of the lip, "Well, I don't care, if I can't flog you, I'll make mouths at your sister."

In regard to Mr. Downing, I don't claim for him infallibility, but I do claim for him the *honor* of being, by common consent, the best writer on Rural Architecture extant. Doubtless he has made mistakes in his lifetime and who has not! indeed, it is *hardly possible* that the immaculate J. W. himself may be laboring under a slight mistake, at this moment—but be that as it may, whatever mistakes, if any, Mr. D. *may have made*, certain it is, he never made such an egregious blunder as to suppose that a very white house, with very green blinds, set down in the midst of a bare plain, was the acme of good taste in rural architecture.

Where are we to look for correct taste in painting, sculpture, architecture, or any of the fine arts, but among those who have spent a lifetime in their pursuit—and certainly when we find any one point in any art upon which professors of that art all agree—it would seem to any reasonable man tolerable good evidence of its correctness. So it is in regard to neutral tints for country houses—the arguments advanced in their favor never have been, nor can they be refuted, J. W. notwithstanding.

Boston, July, 1851. J. B. D.

A GENUINE IRISH BULL.—An Irishman dropped a letter into the Westfield Post Office, the other day, with the following memorandum on its corner for the benefit of all indolent postmasters into whose hands it might fall: "Please hasten the delay of this!"

WATER.

THE GRAND CONSTITUENT AND SOLVENT.

Of organic bodies, whether vegetable or animal, water is a large constituent during life, and a powerful solvent after death. Potatoes, for example, contain 75 per cent., (by weight,) and turnips no less than 90 per cent. of water, which explains, by the way, the small inclination of turnip-fed cattle and sheep for drink. A beef-steak strongly pressed between blotting-paper yields nearly four-fifths of its weight of water. Of the human frame (bones included) only about one-fourth is solid matter, (chiefly carbon and nitrogen) the rest is water. If a man weighing 10 stone were squeezed flat under a hydraulic press, 7 1-2 stones of water would run out, and only 2 1-2 stones of dry residue would remain. A man is, therefore, chemically speaking, 45 lbs. of carbon and nitrogen diffused through 5 1-2 pails full of water. Berzilius, indeed, in recording the fact, justly remarks, that the living organism is to be regarded merely as a mass diffused in water; and Dalton, by a number of experiments tried on his own person, found that of the food with which we daily repair this water-built fabric, five-sixths are also of water.

The sap of plants is a solution of material matters, saline and organic, in water, which distributes them so rapidly that its upward course through the minute vessels (as observed by Lindley in the stripules of the ficus elastica) looks like the rushing of a swift stream. A pail full of water, suitably impregnated with salt, is speedily sucked up by the root of a growing tree immersed in it; the salts are assimilated, as is also a part of the water, the remainder being evaporated from the leaves. Food or provisions may thus be artificially administered to plants; and timber is thus hardened in France, and even stained, whilst living, of divers brilliant hues. As for evaporation from foliage, it is so abundant that a sunflower perspires 1 1-4 pail per diem, and a cabbage nearly as much—nay, it appears from valuable experiments published by Mr. Lawes, of Rothamsted, that a wheat plant, during the period of its growth (170 days) exhales about 100,000 grains of water, so that, taking the ultimate weight of the mature plant at 100 grains, which is a full estimate, its mean daily perspiration actually exceeds ten times its own mean weight. At this rate an acre of growing wheat, (weighing, at least, two tons at maturity,) should exhale, on an average, fully ten tons of water per diem.

Of a plaster of Paris statue, weighing 5 lbs., more than 1 lb. is solidified water. Even the iridiscent opal is but a mass of flint and water combined in the proportion of nine grains of the earthly ingredient to one of the fluid. Of one acre of clay land, a foot deep, weighing about 1,200 tons, at least 400 tons are water; and even of the great mountain chains with which the globe is ribbed, many millions of tons are water solidified in earth.

Water, indeed, exists to an extent and under conditions which escape the notice of cursory observers. When the dyer buys of the drysalter 100 lbs. each of alum, carbonate of soda, and soap, he obtains in exchange, for his money, no less than 45 lbs. of water in the first, 64 lbs. in the second, and a variable quantity, sometimes amounting to 73 1-2 lbs., in the third.

Even the transparent air we breathe contains in ordinary weather about five grains of water diffused

through each cubic foot of its bulk; and this rarefied water no more wets the air than the solidified water wets the solid material on which it is absorbed.—*Daguerrian Journal.*

MANGE IN HORSES.

This is a pimpled or lumpy eruption. After a while the vesicle breaks, the cuticle and the hair fall off, and there is, as in obstinate surfeit, a bare spot left covered with scurf; but some fluid oozes from the skin beneath, and this scurfiness changes to a scab, which likewise soon peals off and leaves a wider spot; sometimes another scab succeeds to the first, but oftener a mere scaly, greasy-feeling, bare spot remains. This is attended with considerable itching and tenderness, and thickening of the skin, which soon becomes more or less folded or puckered. The mange generally first appears on the neck, at the root of the mane, and its existence may be pretty truly ascertained, even before the blotches appear, and when there is only considerable itchiness of the part, by the ease with which the short hair at the root of the mane is plucked out. From the neck it spreads upwards to the head or downwards to the withers and back, and occasionally extends over the whole carcase of the horse.

One cause of it is neglected or inveterate surfeit; the more common cause is contagion. No disease is more contagious than this. The same brush or curry comb used on all horses will propagate it.

The propriety of bleeding in cases of mange must depend on the condition of the patient. If it be the result of poverty and the animal is much debilitated, bleeding will be adding power to the cause of the disease. Physic, however, is indispensable. It is the first step in the progress towards cure. A mercurial ball will be preferable to a common aloetic one, as more certain and effectual in its operation. In this, however, mange in the horse resembles itch in the human being—that medicine alone will never effect a cure. There must be some local application. There is in it this further similarity, that that which is most effectual in curing itch, must form the basis of every local application as it regards the horse. Sulphur is indispensable in every unguent for mange.

In an early and very acute state of mange, one ounce of the flour of sulphur should be well rubbed down with an equal quantity of train oil, and half an ounce of common turpentine. A tolerably stout brush or even a curry comb, lightly applied, should be used whenever there is any appearance of mange, to remove the dandriff or scurf. After that, the horse should be washed with strong soap and water as far as the disease has extended; and when he has been thoroughly dried, the ointment should be well rubbed in with the naked hand or with a piece of flannel. More good will be done by a little of the ointment being rubbed in, than by a great deal being merely smeared over the part. The rubbing should be daily repeated. During the application of the ointment, and as soon as the physic has set, an alterative ball or powder similar to those recommended for the other affections of the skin, should be daily given. If after some days have passed and no progress should appear to have been made, half a pound of sulphur may be well mixed with a pint of oil of tar, or, if that is not to be obtained, a pint of Barbadoes tar, and the affected parts rubbed as before. On every fifth and sixth day, the ointment should be washed out with warm soap and water. The progress towards cure will will be ascertained; the skin will be cleaned, and its pores opened for the more effectual application of the ointment.

The horse should be well supplied with nourishing, but not stimulating food.

FARMING IN INDIANA.

Henry L. Ellsworth, Esq., Indiana, (formerly of Hartford,) recently delivered a lecture in that city, on "Agriculture at the West," which shows the surprising fertility of the soil in Indiana.

He spoke of the large amount of agricultural products raised in Indiana, and the low prices of produce. Butter there sells for 4 and 6 cents per pound, such as would bring 25 in New York city; chickens 75 cents per dozen; turkies 25 cents each. He spoke of the various kinds of fences used, and showed a model of one which he considered best, which cost but $110 per mile, and it could be taken up and easily moved at pleasure. Houses two stories high 18 by 20 feet, were put up there on contract for $110 each, and painted with a cheap paint made of tallow, lime, &c., for 22 dollars. He could raise corn in Indiana for five cents a bushel, and a smart young man could cultivate and take care of 40 acres alone. In ploughing, they do not hold the plough, but set it in the soil and draw it along from two wheels. Farms are rented out for one-third of their produce. No manure is used on the soil—it would not pay the trouble of carting it. He said that cows were worked there as well as oxen, to good advantage; although they would not give quite as large a quantity of milk, when worked. He raised hay and pressed it for exportation for $1,75 per ton. He spoke of the railroads and canals that were in progress in the western country, which would be of great advantage in getting their produce to the eastern cities. Plank roads were much used, and built for $1500 per mile—paying 30 to 40 per cent. interest.

SUGGESTIONS.

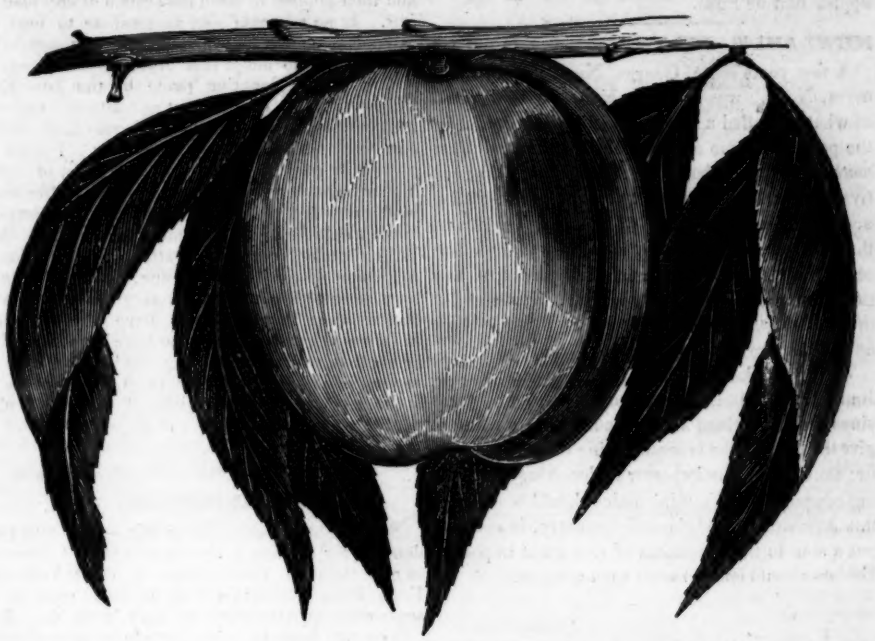
When I see ploughing done, year after year, in the same track, beside a fence or a gully, till a dyke of considerable height is thrown up, and of course a corresponding leanness in the interior, thinks I to myself there is a want of good husbandry.

When I see a stone wall topped out with a single tier of round stone, thinks I to myself the upper foot in the height of such walls ought never to have been put on, and look out for dull sythes and loss of hay.

When I see a fruit tree loaded with twice the top necessary for bearing well; and this perhaps partly dead, thereby keeping the rays of the sun from the under crop, thinks I to myself, there is an indication of bad husbandry.

When I see a total failure of a crop of Indian corn, thinks I to myself, if that man had bestowed all the manure and perhaps two-thirds the labor on half the ground, he would have had a fair crop of ruta baga the following year.

When I see a farmer selling his ashes for ten cents per bushel, thinks I to myself, that farmer had better given his purchaser ten cents to leave them to his corn and grain.—*Maine Farmer.*



HALE'S MELOCOTON PEACH.

This peach has been raised by Col. Elisha Hale, of Rock Bottom, (Stow,) from the seed, for more than twenty years, and it invariably produces the same fruit. This fruit is remarkably rich and sweet and uniformly good. It is also noted for its long keeping in excellent condition. We received a quantity of these peaches from Col. Hale one season; we took no unusual pains to preserve them, and used them daily for one week, and they continued good until the last. We regard this as a very important advantage. Another great advantage attending this variety, is the production of precisely the same fruit from seed, saving the trouble and uncertainty of budding. We have raised hundreds of these trees in the nursery, which were perfectly uniform in their appearance; as much so as Baldwins, or any other variety that have been budded. As this peach is not very large, nor very beautiful, it may not be so saleable in market as large and showy peaches. It may not sell for what it is really worth, while peaches of more show may sell beyond their intrinsic value. Yet a moderate proportion of them may be profitable for market, and for one's own use it is a very valuable variety. There are other peaches raised from seed, and propagated also by budding, that very nearly resemble this, and some are doubtless identical with it. This peach resembles the English Melocoton, so called, raised in Maine some forty years ago. The fruit is of medial size; oblong, flat at the base, slight suture on one side; bright yellow; flesh yellow, of a very rich, sweet, and excellent flavor, freestone. The tree is of moderate growth and very hardy. It is a good bearer, and bears early. Reniform glands; ripe from the 5th to the 15th of September.

WHITE BLACKBERRIES.

A few weeks since, when passing through the cultivated grounds of the Messrs. Needhams, in West Danvers, which have yielded such an abundance of delicious strawberries the present season, our attention was attracted to some luxuriant bushes, about four feet in height, which we were told yielded a berry—called the *white blackberry*. To-day we have been kindly favored by the gentlemanly proprietors with a box of this fruit matured. It is not exactly white, but more *white* than *black*, resembling in appearance and taste the fruit of the mulberry quite as much as the blackberry. The luxuriant growth and abundant produce of this shrub make it desirable to be cultivated by those who are ambitious of supplying a variety of the best fruits of the season.

July 23, 1851.

Grafting the Grape.—Mr. John Washburn, of Plymouth, informs us that he set in April some scions of the Diana grape, which we sent him by cleft grafting, and that they have grown six or seven feet. He also states that they will have a

good show of pears in that region, but the crop of apples will be light.

NEWLAND'S STRAWBERRY HUMBUG.

A few years since, George Newland, from Palmyra, N. Y., was in this region, and sold plants of what he called a new seedling strawberry, under the pompous name of "*Newland's Celebrated Mammoth Alpine Strawberry.*" A large number of cultivators purchased plants, gave them a fair trial, and condemned them as worthless. They were the old wood strawberry, or something very nearly resembling it. So the whole affair proved to be a great humbug. This being known, Newland left this region, and has been operating in parts where he and his strawberry were not so well known.

We see by a late number of the Pennsylvania Farm Journal, the editor has received a present of some vines from Newland's agent, and before waiting to give them a trial he is commending them to the public; thus aiding this impostor in deceiving the farming community. We think notice should be given of this imposition throughout the country, in order to put a stop to the operations of this great impostor. Editors should check rather than aid him.

For the New England Farmer.

MR. WHIPPLE'S DEEP PLOUGHING.

A striking instance of the benefits resulting from continued deep ploughing was brought to our notice yesterday, on viewing the cultivated grounds of A. M. Whipple, Esq., on the banks of the Concord river, near Lowell. This land was naturally a sandy and light soil. His men were engaged in gathering in the crop of hay from an extensive field, which had yielded more than two tons to the acre. The inquiry arose, by what means was the crop made so abundant, on land so shallow? His answer was, *deep ploughing, mainly.* That for eight or ten years past, he usually ploughed *twelve inches* deep. That he put on his grounds but a light dressing of stable manure,—made no compost whatever—but relied almost entirely on the improvement of the soil, by turning the furrows deep. His crops were quite equal to those we have been accustomed to see on strong land, highly manured. He has literally made more than two blades of grass to grow, where but one grew before, and this with no other expense, except the labor of his teams. Similar benefits were apparent in the growing crops of corn and oats, in the lots adjoining.

As we were looking at the luxuriant fields of oats, on which will probably be cut more than two tons of fodder to the acre, Mr. Whipple explained how he saved his potatoes on this field, in the summer of 1850, when in most other fields in the neighborhood they decayed. He planted his corn and potatoes in alternate rows, so that the potatoes were constantly shaded, after the first of July, by the corn. Whether this shading was beneficial or not he could not say. Here he had sound potatoes, and where his potatoes were not shaded, they rotted. Mr. W. has also been very successful in bringing his adjoining swamps and wet meadows into good English mowing. He first cleared off the surplus water by ditches properly arranged, and then applied to them his system of *deep ploughing*. In no one case does he presume to have his ground ploughed less than *twelve inches deep*. He was first led to adopt this mode of ploughing, by seeing the explanation made by the late Elias Phinney, Esq., of the vast quantity of vegetable matter to be found on an acre of grass land, within *one foot* of the surface—*twelve tons*. I think he proved by analyzing a single cubic foot of earth. Hence he reasoned, if all this vegetable matter could be decomposed and brought into active operation, crops would be in need of no other manure. Mr. W.'s abundant crops are a striking illustration of the soundness of his reasoning. We, who have been accustomed to value highly the products of the compost heap, should have thought some of this mode, which could also have been beneficially applied; for when we can find a full crop of two tons to the acre without them, there seems to be no need of such application. P.

August 1st, 1851.

For the New England Farmer.

CRANBERRIES.

S. W. Cole, Esq.:—Dear Sir,—You will pardon me for making a simple request. I observed in an article on the cranberry in the "American Fruit Book," that this fruit is found growing in some cases spontaneously on high lands, &c., &c.

You will favor by informing me by mail at your earliest convenience, where I could examine them, and the nearest place to Albany that I would be likely to find them. I have been quite successful in cultivating the cranberry on upland, and think I have a variety perfectly adapted to upland cultivation. In my researches I have found several varieties of the cranberry, and know of but one worthy of cultivation in upland.

I should be happy to send you a specimen of the fruit in the fall, and I think that you will acknowledge that it is ahead of anything of the kind that you have met with.

My method is to plough deep or remove the top soil or sod previous to setting the plants, and the poorest kind of soil is the best, provided it will stand a drought tolerable fair, and mulch the first year, stirring the soil well with the cultivator, or hoe between the drills.

By returning an answer to the above you will oblige a friend to all worthy improvements in fruit culture, and I will favor by using my influence in circulating your (to me) valuable works, which are well adapted to the wants of many in this vicinity. Yours truly,

F. B. Fancher, Horticulturist.

Lansinburg, N. Y., Aug. 1, 1851.

Remarks.—Although the preceding communication was not intended for publication, we give it to the public, as it contains some valuable hints on the cultivation of the cranberry. We shall be happy to receive in the fall a specimen of fruit as proposed. We know of no cranberry of spontaneous growth in the region of Albany.

We have seen a patch in Lincoln, some 16 miles from Boston, on the farm of Major Daniel Weston, on a very dry, poor, gravelly knoll. They

bore well, and the fruit was large and fine, and kept much better than that raised on low lands.

We have seen some fine cranberries of spontaneous growth on high land in Reading, about 12 miles from this city. The land was in a wild state, very poor, hard and dry, but the cranberries large and bearing well. In Cape Elizabeth, Me., we saw a good crop of cranberries in a grass field by the side of a fine piece of barley, which the owner was then reaping. We dug down among the cranberries, and examined the soil, and found it mostly a poor sand, and very dry. As this was on flat land, it might be well watered in winter and early spring.

There are numerous instances, throughout the country, of the spontaneous growth of cranberries on high land, bearing abundantly, and in some cases flourishing well, under, apparently, the greatest disadvantages. This seems to be conclusive evidence that they will do well on high land under good management.—Ed.

For the New England Farmer.

REMEDY FOR THE POTATO ROT.

Mr. Editor:—I beg leave to say with regard to the potato rot, that I discovered the small black bug that Mr. Flanders speaks of five years ago, and that I expressed to a neighbor of mine that this was probably the first cause of the decay in the potato. If I mistake not, the leaves were intended as lungs to the plant, and after being so completely perforated in such a manner as to destroy the health of the vine, I think it is in vain to expect sound potatoes.

I would state that I have found common hard wood ashes a complete remedy; my method is to apply a small portion in each hill on planting the seed, and after they come up dust the ashes thoroughly both upon the upper and under sides of the vines during their growth. This bug is about the size of a flea, and upon approaching the vines and disturbing them they will hop similar to one; they are also furnished with wings and can fly swiftly.

Yours, respectfully,

William F. White.

Framingham, July 28, 1851.

Remarks.—This black bug is no new thing; and in thousands of cases the potato rots extensively, when this bug has not been seen. If insects cause the potato rot, those who advocate this hypothesis ought to prove it, for what they consider the cause is something tangible, and admits of demonstration.

For the New England Farmer.

WHITE BLACKBERRIES.

Mr. Cole:—Having several times adverted to the *berries* raised by Mr. J. S. Needham, called the *white blackberry*, I beg leave to state that my attention was yesterday called to a box of these berries, fully ripe, and in condition for use. They are a fine fruit, equal to any berry of the field—unless the raspberry may be considered superior. Its productive qualities surpass all others. I learn from Mr. N. that one bush has yielded the present season *eleven quarts*. The plant is hardy and well calculated to endure our climate. The original of his plants came from the woods of Maine. Those who would know more of this plant, had better call at Mr. Needham's, where upon his grounds is to be seen much that is instructive in cultivation. His patch of highland cranberries are in very fine condition. P.

Danvers, Aug. 5, 1851.

For the New England Farmer.

A QUESTION FOR THE BELIEVERS IN THE INSECT THEORY.

Mr. Cole:—If, for example, the aphides on the tender shoots of the apple-tree, although large enough to be seen, and closely covering the surface of the shoots, are still unable during a single season to destroy them, "*it is required to know*" the number and size of the potato insect which in the same time destroys almost simultaneously an infinitely greater number of stocks of a more fibrous and less succulent plant, digging also down into the earth, "destroying them root and branch," to the amount of some thousands of bushels in every neighborhood? A general solution to this question is solicited.

W. Newbury. B. F. T. G.

For the New England Farmer.

CULTIVATION OF THE SEBA BEAN.

Mr. Editor:—The scrawl which I am about *to do*, will be, I am well aware, rather out of season; but as all the subscribers to the "N. E. Farmer" preserve their papers from month to month, and then, at the end of the year, have them bound in a tasteful and durable manner, it will make but little difference, as they can readily refer to it when spring time shall again return. I say *all* your subscribers preserve their papers, but perhaps I speak unadvisedly; there may be those who are so indifferent to their *lasting* worth as to destroy them. If there are any of this class among your patrons, I would say to them, "Sin no more."

The Seba bean yields very largely when rightly managed, and generally commands a high price in the market; and when these important facts are taken into consideration, I think I shall be justified in saying that it is a *profitable* bean for our farmers to cultivate. And if it is profitable, the reader will pay some little attention to raising it, of course; therefore he must have all things ready "in time." Take two cords of light, well-rotted horse manure, and pitch it up so as to form a sort of basin. Intothis basin run a load of good night-soil, not very thick, and then cover it over by throwing up the edges of the heap, just enough to prevent the escape of its rich qualities. This being done, let it remain a few days, and then overhaul it and mix the horse manure and night-soil well together. Thus much should be done some three or four weeks before the time for planting the beans. Just before you want to use the manure, overhaul it again; it will then be in excellent order; and if the beans that grow out of it ain't "some pumpkins," why, then I'll guess again, that's all! If all the heap is not wanted for the beans, the remainder will be first-rate for almost any other crop. After preparing the manure (or *before* perhaps would be better) select a piece of ground

suitable for your purpose—for the Seba. A cold soil and situation is not adapted to it at all. You must accordingly select a warm, deep and fertile soil, with a southern or south-western exposure, where they may be protected as much as possible from the cold storms and winds of spring so common and severe in this region.

Plough the ground deep and thorough, harrow well, then plough and harrow again, and thus the soil becomes a fine tilth. Furrow the rows four feet apart. Manure in the hill, liberally. Put the hills three feet apart. Run no risk in regard to the seed, but plant such as you can rely upon as being new and good, if it can be obtained at any price. If possible, plant that which was raised the previous year, as this bean is rather difficult about coming up well at the best, especially if planted rather early. Old, poor seed of any kind, for planting, is a dear article, even as a gift. Though seemingly cheap at first, in the end it costs much time and labor, and often detracts much from the value of the crop, as the necessity of planting over when it should be up and growing causes a late and dimidutive yield even if it comes to maturity at all. Cover the manure thinly with dirt before dropping the seed. Seed liberally, as it is much better to have too many come up than not enough, as they can be easily thinned out. Care should be taken not to cover the seed too deep. Four beans are enough to remain in a hill, but there is no need of being in a hurry about thinning them out, as the cut-worm is apt to destroy them while they are young and tender. This worm should be looked after. He commits his depredations in the night, and in the morning his own works of devastation mark the spot where he may be found. Dig him out and punish him according to his deserts.

As to the time of planting the Seba, very much depends on the season. I should not recommend planting, in this section, before the first of May, even in the most favorable season. As a general thing the middle of the month is about as early as is advisable. If suffered to remain long in the cold earth the seed will not germinate. Oftentimes I should plant as late as the 20th of May, in preference to the 1st. After the Seba is well up, and hoed, it should be poled; if this has not been attended to before. I have observed that some farmers use long poles for this bean—say twenty feet in length. What *reasons* they can give for this, I know not; probably they have some very plausible ones, but I very much doubt whether they are really sound and practical. The extra trouble and expense necessary in obtaining poles of this length is no very small item. I must enter my protest against the practice, as I believe it lessens the productiveness of the vines. A pole that stands seven feet out of the ground when stuck is long enough, and far preferable to a twenty-footer, for "good and sufficient reasons." On long poles the vines continue climbing up through the season, and the blossoms are not sufficiently protected by the leaves, but are too much exposed both to the hot sun and the cold east winds, and the consequence is a great many of the pods are not matured. Where short poles are used the vines soon reach the tops, and then turn and grow downwards, forming a thick and luxuriant covering for the tender pods and blossoms, which serve as an ample protection to them under all circumstances, and even saves many of the green beans from being injured by the early autumn frosts. Therefore it is much better policy to use short poles for the Seba than long ones.

As this bean is rather disinclined to take to the poles of its own accord, it usually becomes necessary to tie it up. Do this as soon as the runners are of sufficient length. Handle them very carefully. The best article for this purpose is rhubarb skin. It is soft and pliable, and does not chafe the vines. J. W.

For the New England Farmer.

BLUE STEM WINTER WHEAT.

S. W. Cole, Esq.:—We wish to call the attention of your farmers to the subject of *Winter Wheat*. The kind most favorable to our climate is that known as "Banner" or "Kloss" Wheat—which has been raised with great success for a few years past, till it now promises to furnish bread for our whole State. The average yield last year was 30 bushels per acre, and the prospect is for a larger yield the present, as more pains have been taken in the selection and preparing of ground. It is better to sow during this month, as it gives a better *fall feed* for young cattle, though it will *do well* if sown any time in September.

We acted as agents for the sale of the wheat last year, and sent it into every county in the State, from all of which we hear favorable reports.

The harvesting has just commenced, and we shall probably be able to fill any orders from your section, if applied for in season.

The price here will probably be two dollars.

Very respectfully, John Means & Son.

Augusta, Me., Aug. 1, 1851.

Remarks.—Mr. Kloss, as has been lately ascertained, did not originate this wheat, therefore it should not bear his name. And the name Banner was given to it, as Mr. Drew, editor of the Gospel Banner, raised some from seed sent him from the Patent Office, which he distributed. This was improper, to add a local name, which makes confusion.

For the New England Farmer.

MULTICOLE RYE.

Mr. Editor:—I would like to have the New England Farmer give some information respecting a new variety of rye called the "*Multicole*," which is mentioned in the Patent Office Report on Agriculture for 1849—50. A writer from Cumberland Co., Virginia says, "A new variety of this grain called the *Multicole*, issued originally from the Patent Office, has lately reached my neighborhood from Lynchburg. The crops from which it came were extraordinary. It had been sown by a gentleman near me on trial—as horse feed. Common rye, from what cause I know not, never prospered in this region, and its culture has rarely been attempted."

Another writer from Mississippi, in the same Report, page 153, says: "I have grown the *Multicole*, and the St. Johns-day rye, or '*Seigle de St. Jean*,' imported from England and France; neither of these were superior to the common 'up country rye,'" &c. I understand the *Multicole rye* has been grown with success in Vermont. Can you,

or some of your readers, give the desired information; and if the kind is superior to the old, state where the seed can be obtained in season to sow this fall! Yours, &c., T. Stearns.

Mansfield, July 21st, 1851.

For the New England Farmer.

THE SUMMER CATERPILLAR OR WEB-WORM.

Mr. Editor:—This insect has commenced his ravages on fruit and forest trees; and it should be attended to in season. It works longer than the common caterpillar, and now that they have become numerous, they make trees look quite as badly as their namesake. They may be easily taken and destroyed by examining the branches where they are at work. They will be found in the cool parts of the day collected upon the under side of a single leaf, in some cases. Our way is to cut off these leaves with the pruning shears, and then kill the insects.

GERMAN AGRICULTURE.

Each German has his house, his orchard, his road-side trees, so laden with fruit, that if he did not carefully prop up and tie together, and in many places hold the boughs together with wooden clamps, they would be torn asunder by their own weight. He has his corn plot, his plot of mangold wurtzel, or hay, for potatoes, for hemp, &c. He is his own master, and he, therefore, and every branch of his family, have the strongest motive for constant exertion. You see the effect of this in his industry and his economy.

In Germany nothing is lost. The produce of the trees and the cows is carried to market; much fruit is dried for winter use. You see it lying in the sun to dry. You see strings of them hanging from their chamber windows in the sun. The cows are kept up for the greater part of the year, and every green thing is collected for them. Every little nook, where the grass grows by road-side and river, and brook, is carefully cut with the sickle, and carried home on the heads of the women and children in baskets, or tied in large cloths. Nothing of any kind that can possibly be made of any use is lost; weeds, nettles, nay, the very goose grass which covers waste places, is cut and taken for the cows. You see the little children standing in the streets of the villages, in the streams which generally run down them, busy washing these weeds before they are given to the cattle.

They carefully collect the leaves of the marsh grass, carefully cut their potato tops for them, and even if other things fail, gather green leaves from the woodlands. One cannot help thinking continually of the enormous waste of such things in England—of the vast quantities of grass on banks, by road-sides, in the openings of plantations, in lanes, in church-yards, where grass from year to year springs and dies, but which, if carefully cut, would maintain many thousand cows for the poor.

To pursue still further this subject of German economy. The very cuttings of the vines are dried and preserved for winter fodder. The tops and refuse of hemp serve as bedding for the cows; nay, even the rough stalks of the poppies, after the heads have been gathered for oil, are saved, and all these are converted into manure for the land. When these are not sufficient, the children are sent into the woods to gather moss, and all our readers familiar with Germany will remember to have seen them coming homeward with large bundles of this on their heads. In autumn, the falling leaves are gathered and stacked for the same purpose. The fir cones, which with us lie and rot in the woods, are carefully collected and sold for lighting fires.

In short, the economy and care of the German peasants are an example to all Europe. They have for years, nay ages, been doing that, as it regards agricultural management, to which the British public is but just now beginning to open its eyes. Time, also, is as carefully economised as everything else. They are early risers, as may well be conceived, when the children, many of whom come from a considerable distance, are in school at six in the morning. As they tend their cattle or their swine, the knitting never ceases, and hence the quantities of stockings and other household things which they accumulate are astonishing.—*Howitt.*

REMEDY FOR A COW WHO SUCKS HERSELF.

Mr. Editor:—Hearing recently an effectual cure for this inveterate habit, and at the same time a very simple one, which has been tried in this vicinity and found to answer completely, I send it for insertion in the Farm Journal.

Draw the cow up by a halter to a fence corner, or stall in the stable, and insert in the same manner as a ring is put into a bull's nose, a round stick through the cartilage which divides the nostril, (and which is quickly done by a single blow with a mallet,) say about six inches long, and let it remain. It will occasion no inconvenience to the cow, and whenever she attempts to suck herself, it will cause such a strain on the nose as to make her desist instantly. The proper length for the stick to extend each side of the nose, can better be told upon trial, as it may be lengthened or shortened, as may be found necessary. To make it still more effectual it might be pointed at each end.

The habit of sucking herself in the cow, is one almost impossible to break by any contrivance of yokes or muzzles, and it is not dissimilar to intemperance in the human subject. Total abstinence being the only safety, a taste being once had, self-control is gone. I once had a valuable heifer, (I raised from the celebrated McEloy cow,) who made 16 lbs. of butter in a week, and which I was obliged almost to give away on account of this habit. She promised to be equal to her dam in butter qualities, and many expedients were tried to break her, but ineffectually. A stiff muzzle was put on her, well supplied with sharp spikes. Her udder, so violent was her fondness for her own milk, would often be scored with deep cuts, and drops of blood, but she would still get it. A stiff yoke on the neck was also tried, which looked as if it would entirely prevent her turning her head round. This also hurt her and was ineffectual.

Had this cow been cured of this habit, she would now have been worth $100. Her mother was a most remarkable animal for deep milking, and her former owner, before I purchased her, was said to have sent to market from her, 17 lbs. of butter per week. She made with me nearly 15 lbs. of butter a week, on grass alone. Edge Cope, residing about two miles from this place, and whose

statement can be entirely relied upon, now owns a heifer from her, who made last season, when she was on trial and milked three times a day, 17 lbs. of butter in a week. The milk was weighed each time, instead of being measured, and reached about 75 lbs. per day. He weighed it himself to avoid mistakes.

The simple recipe here given, and also one by James Gowen in the first number of the Farm Journal, of the hay rope in cases of hoven, (and which I also tried and thereby saved the life of a Durham bull which cost me $550,) are strong illustrations of the value of agricultural journals, and are worth the price of many years' subscription. PASCHALL MORRIS.

West Chester, June 20, 1851.

AGRICULTURE IN FRANCE.

A letter writer for the Republic says:—"A trip of six hundred and fifty miles, from the northern to the southern extremity of France, justifies me in the expression of my opinion that God's sun does not shed its rays on so fair a land, or one so thoroughly cultivated. The whole country is literally a garden. Every square foot, from the mountain-top down to the lowest ravine, is made to produce *something*, if it be susceptible of it. Their mode of planting or sowing their crops, whether on plain or hill-side, produces the finest effect on the appearance of the landscape; the space allotted for each crop is laid out in squares or parallelograms with mathematical precision, and, whether large or small, the best garden could not be divided with greater accuracy. As there are no fences or hedges, and as the different crops are in various stages of maturity, you can imagine the variety of hues that meets the eye, and the magnificence of the panorama that stretches out in every direction as far as the vision can penetrate. I am sorry to add in this connection, that seven-eighths of the agricultural labor is performed by females, while two or three hundred thousand stalwart men in uniform are idling away their time in the barracks of the cities and villages. In the absence of fences, cattle, secured by ropes, are driven about their pasturage by females; and sheep are confined within the required limits by boys, assisted by a shepherd's dog. Speaking of cattle, reminds me that, notwithstanding fresh pork is abundant enough in market, both in England and France, I have not seen a live porker in either country."

DECOMPOSITION OF BONES BY FERMENTATION.

If fresh bones are thrown into compact heaps and mixed with moist sandy loam and ashes, they will gradually become heated and decomposed. The result will be materially hastened, by occasionally sprinkling with urine, and especially by mixing with horse manure. If the bones have been deprived of their animal matter they will not ferment. The presence of nitrogen is essential to induce and carry forward fermentation, and this is only found in the animalized matter of the bones. During the decomposition of bones, putrefactive odors are given off, which occasion a loss to the manure heap, while they are an insufferable annoyance to the olfactories. This objection, however, may, in a good degree, be remedied, by covering the heap with rich decayed turf, peat, plaster, charcoal, or any other absorbents.

The value of bones for agriculture may be inferred from the fact that nearly 33,000 tons were imported into England in 1848. The value of bones used for agricultural purposes in that country, annually, is estimated at about $4,400,000. In the United States they are fast becoming appreciated, and it will not be long before every bone in this country will be carefully husbanded, and applied to the augmentation of our crops.—*American Agriculturist.*

☞ "Scientific farming" is the ascertaining of what substances the plants you wish to raise are made—which of these substances are wanting in your land—and what manures will supply them.

Mechanics' Department, Arts, &c.

OUR NAVIGATION.

The following statement shows the number and tonnage of the vessels built in each State and Territory of the United States, for the year ending on the 30th of June, 1850. It is taken from the report of the Registry of the Treasury of the commerce and navigation of the United States for the fiscal year.

Of the vessels comprised in the table, there were two hundred and forty-seven ships, one hundred and seventeen brigs, five hundred and forty-seven schooners, two hundred and ninety sloops and canal boats, and one hundred and fifty-nine steamers. The largest number built in any State was one hundred and twenty-seven, in Maine; and the largest number of steamers, thirty-four, in Kentucky. The largest tonnage set afloat during the year is that of Maine, and the next largest of New York. Of the one hundred and fifty vessels built in Maryland, one hundred and twenty-five were schooners.

RECAPITULATION.

States.	Vessels built.	Total tonnage.
Maine,	326	91,211 73
New Hampshire,	10	6,914 32
Vermont,	1	77 41
Massachusetts,	121	35,836 14
Rhode Island,	14	3,587 15
Connecticut,	47	4,819 79
New York,	224	58,342 73
New Jersey,	57	6,201 68
Pennsylvania,	185	21,409 93
Delaware,	16	1,848 82
Maryland,	150	15,064 80
District of Columbia,	8	288 17
Virginia,	34	3,584 04
North Carolina,	33	2,651 59
Georgia,	6	683 82
Florida,	2	79 75
Alabama,	3	113 66
Louisana,	24	1,592 38
Kentucky,	34	6,460 69
Missouri,	5	1,352 82
Illinois,	13	1,691 21
Ohio,	31	5,214 62
Michigan,	14	2,061 62
Texas,	1	105 54
Oregon,	2	122 42
Total,	1,360	272,218 54

MARBLE STAINING.

This art, which is practiced to some considerable extent, in rendering more rich and beautiful many of the harder kinds of marble, appears to have been known at an early date, even as far back as 1666—

it was practiced by a Mr. Bird, a stone cutter, at Oxford, although his method is not recorded. More subsequently Mr. Robert Chambers, of Minchinhampton, in Gloucestershire, (Eng.) discovered and practiced a method of staining marble of various colors, which he called a secret. The colors were so well and intimately combined with the marble, that Da Costa, who tried many experiments on several specimens of marble stained by this artist, found it impossible to remove them even by boiling in a strong alkaline solution. Since then the art has been known and practiced by many as a secret, which has proved to those engaged in it a very lucrative employment. Kircher, we believe, was the first writer that has given publicity to any thing practicable in regard to the operation. Meeting with stones in some cabinets supposed to be natural, but with figures so peculiar and nice as to lead him to wonder at their beauty and form, he was led to examine them more particularly, and found that not only the surface, but the whole thickness was perforated by the colors. He at once suspected the truth, and sought out the person who executed the work, and endeavored to learn from him the secret. This he could not obtain on any terms, as the artist considered the secret too valuable to part with on any conditions. Foiled in this attempt, he at once, with a Saxon named Gunter, by numerous experiments, succeeded in producing the same results. They used aqua-fortis and aqua-regia and sal ammoniac, two ounces of each of the two former, and one ounce of the latter, together with two drams spirits of wine, twenty-six grains of gold and two drams of pure silver. They calcined the silver, put it in a glass vessel and poured the aquafortis upon it, and the mixture left to evaporate. The gold was put into another vessel, aqua-regia poured upon it, and when dissolved this mixture was also evaporated. Next, the spirits of wine was put upon the sal ammoniac and evaporated in the same manner. After evaporation the remainder or coloring matter of the several mixtures, which was about the consistence of paint, was applied without the consistence of heat, by tracing the figures with a pencil on the marble, the several parts being touched over with the proper colors. This operation was renewed daily until they had penetrated to the desired depth into the stone. The block or mass, after being thus prepared, may be cut into thin slabs or plates, all of which will have the perfect representation of the figure or form delineated on the surface, as the colors do not spread as they penetrate the block. The most beautiful method of staining by this procress is to apply the colors to each slab separately, on the back, and not permit them to penetrate entirely through the stone, but just deep enough to be seen through the surface on the front after being polished, which process, if skilfully performed, is exceedingly beautiful, and most perfectly resembles veins of delicate color in the natural stone.

The most common method now practiced, however, is by means of heat to open the pores of the marble so as to render it better fitted to receive the colors. Marble of the hardest kind is to be selected, perfectly free from seams or veins, and very finely polished. This is heated to a degree just sufficient to make the staining color boil on its surface. The solvents used to strike in the colors must be varied according to the color to be used. For a blue, stone blue is dissolved in spirits of wine, for a bright red, vermillion dissolved in the same, for a darker shade still finely powdered cochineal may be used; also dragon's blood and a tincture of logwood for the darkest shades. A fine color is also obtained from alkanet root used with oil of turpentine, as alcohol will not mix with this substauce.

The staining of marble to any degree of red or yellow may be produced by dragon's blood or gamboge, reduced to powder and ground with spirits of wine in a glass mortar, and the tincture applied to the stone with a pencil. These tracings will, on heating the marble, penetrate very deep and remain perfectly distinct. A slight tincture of dragon's blood alone, without heat, will be sufficient to produce a pale flesh color, which for some purposes is very desirable. If a very deep or intense color is required a little pitch added to the tincture gives it the desired effect. This art is one of peculiar nicety, and when properly executed is exceedingly beautiful, and may be varied or extended to almost any degree by those who become adepts in the business.—*Farmer and Mechanic.*

IMPROVEMENT IN THE MANUFACTURE OF STEEL.

The London Mechanic's Magazine records an improvement of Ewald Riepe, of Finsbury Square, in refining steel. For this purpose he takes bars or lumps of raw or crude steel (particularly puddle steel,) and in order to the refining of them, places them in a furnace or other heating chamber, out of the reach of any injurious action upon them by the atmospheric air, and there subjects them for a time to a temperature not exceeding the melting point of steel. I use for the purpose a welding furnace, such as is ordinarily employed in puddling iron, only that the bed is lowered and the grate brought from two to four feet below the level of the fire-bridge, and the ash-pit is provided with an iron door, by which it may be entirely closed when required. When the furnace is in full heat, I place the bars or lumps of raw or crude steel on the bed of the furnace, but at distances apart, so that they may nowhere touch each other; and during the whole of the refining process, the fire-place is kept fully charged with coals or other fuel. Then, in order to exclude as much as may be the access of oxygen, I carefully lute any crevices there may be, in the working door or elsewhere, with wet clay, and so regulate the draught of the furnace by means of the ash-pit door and flue-damper—closing them more or less, or altogether, as may be requisite—that the heat shall never attain to the melting point of steel. A sufficient practical test of this is furnished by the color of the flame, which is, with this view, carefully watched through an eyehole in the working door. As long as it keeps of a dull or hardly red color, the heat will not be in excess of what is required. I usually put from 600 lbs. to 3,000 lbs. of raw or crude steel, in bars of 3 inches by 1 1-2 inches, into a furnace of the ordinary size, and continue the operation for about four hours. By this method of operation, carburetted hydrogen and oxide of carbon are developed in the furnace in abundance, while the oxygen of the atmospheric air is entirely prevented from acting on the steel; and the product is steel of a very fine uniform grain.

Ladies' Department.

TREATMENT OF CHILDREN.

Some people do not govern and manage their children well because they have not the ability; some because they do not know how; and others because they are not willing to use the requisite thoughtfulness, and submit to the necessary self-denial, for such self-control as is necessary. For some of these difficulties there is no outward and applicable remedy; others may be aided by a few simple reflections.

Do not lay useless commands upon children and allow them to be violated. If a command is fit to be made it ought to be obeyed, and if it is not proper to be obeyed it ought not to be made. Many parents deem it incumbent on them, in order to vindicate their authority over their children, to give a great many useless or absurd commands, without reflecting on their absurdity till they are carried out; when they must stand before their children committed to a false position to which they must adhere for the sake of authority or consistency, or recede from it for the sake of common sense with the loss of their respect, or must suffer a silent disobedience for the same reasons with the loss of their authority.

Do not threaten punishment unsuited to the case, or which from the nature of the case cannot be inflicted. Children soon learn what the real import of such threatening is; and thus acquire contempt for the authority of their parents, and learn the habit of falsehood at the same time.

Do not attach a threat of penalty to every command Children ought to obey their parents and teachers because they command them. A habit of obedience merely to avoid punishment is one of the worst that can possibly be acquired. A child should learn to do what is right, *because it is right.* This will be a correct rule for him now and always.

Do not contract a habit of talking in a scolding or objugatory manner to children. It discourages them from trying to please you, at the same time, that they will themselves contract a similar habit, to be exhibited whenever their occasion shall come. —*Prairie Farmer.*

THE TIES OF FRIENDSHIP.

Are you a brother? In what manner do you treat this relation? Have the voices that were once pleasant to you lost their tone? Have the cold and pitiless storms of the world frozen the current of your kindred feelings within you; or have they lost their power, and wasted in selfish cares, and hollow, heartless formalities? * * * O! cherish, at home or abroad, the dear ties of kindred, and amid all the turmoil, and all the change of earthly pilgrimage, never, never, forget the obligations which they entail upon you. Summon back the bright visions of boyhood. Call up the stream, the hill-side, and the woodland—call him up whose face so often reflected the joyousness of your own, and whose hand at night warmly clapsed in yours—call up her whose voice, like every sister's voice, was around your sunny path like music—call up those who with you

> ——"played
> Beneath the same green tree.
> And every evening knelt and prayed
> Around one parent knee."

And though they may be far or near, though the ocean may separate, or the grassy grave hide the from you—never in all the rush and shifting lights and shadows of existence, never forget that you are a brother.

How to Keep Worms out of Dried Fruit.—Have a pot full of scalding water over the fire, then put the fruit into sacks of a suitable size, and dip them into the boiling water, which will kill the worm or what causes it. After scalding, spread the fruit out to dry—the scalding does the fruit no injury. Whatever it is that causes the worm, is deposited on the fruit during the process of drying.

☞ Spare minutes are the gold dust of time; and Young was writing a true as well as a striking line, when he affirmed that "sands make the mountain, moments make the year." Of all the portions of our life, the spare minutes are the most fruitful in good or evil. They are gaps through which temptation finds the easiest access to the garden.

☞ The stately dames of Edward the Fourth's court rose with the lark, despatched their dinner at eleven o'clock, and shortly after eight were wrapped in slumber. In the "Northumberland-house Book for 1512," we were told that the family rose at six, breakfasted at seven, dined at ten, and supped at four.

☞ Why is an infant like a diamond? Because it is a "*dear little thing.*"

☞ Kindness, like the gentle breath of spring, melts the icy heart.

☞ The New England Farmer is published *every other* Saturday by John Raynolds and Joel Nourse, at Quincy Hall, South Market Street, Boston.

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